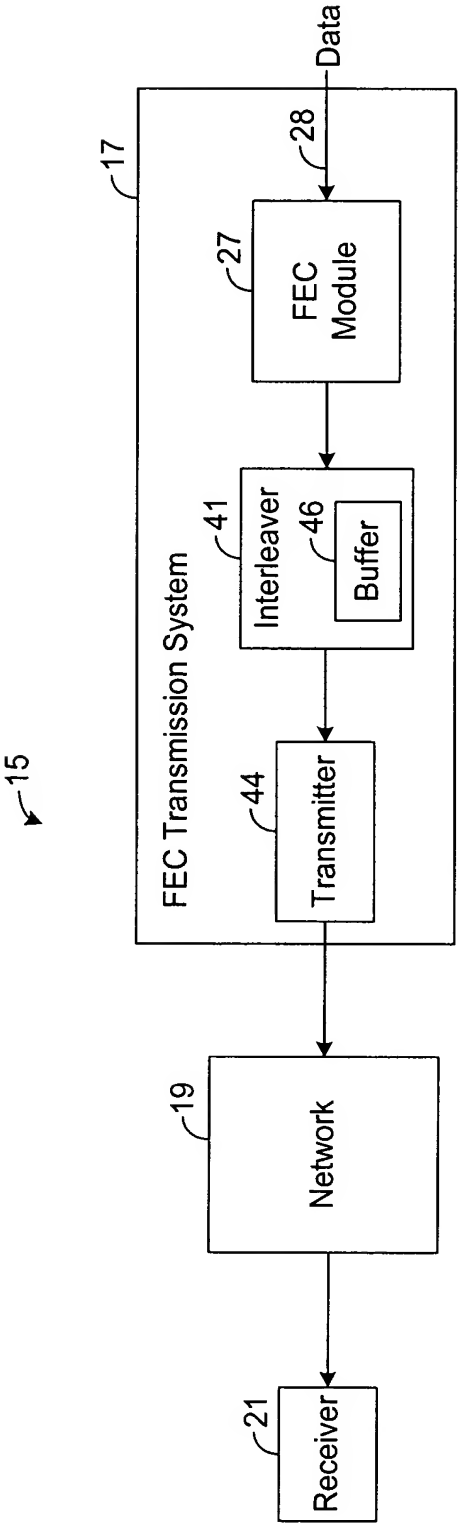

FIG. 1
(Prior Art)

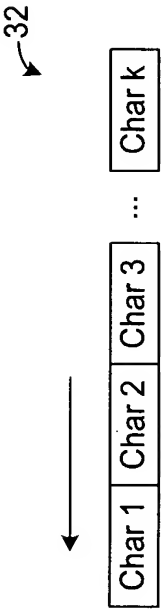

FIG. 2
(Prior Art)

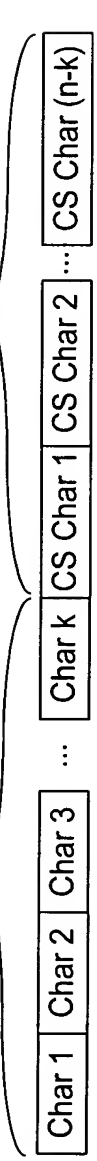

FIG. 3
(Prior Art)

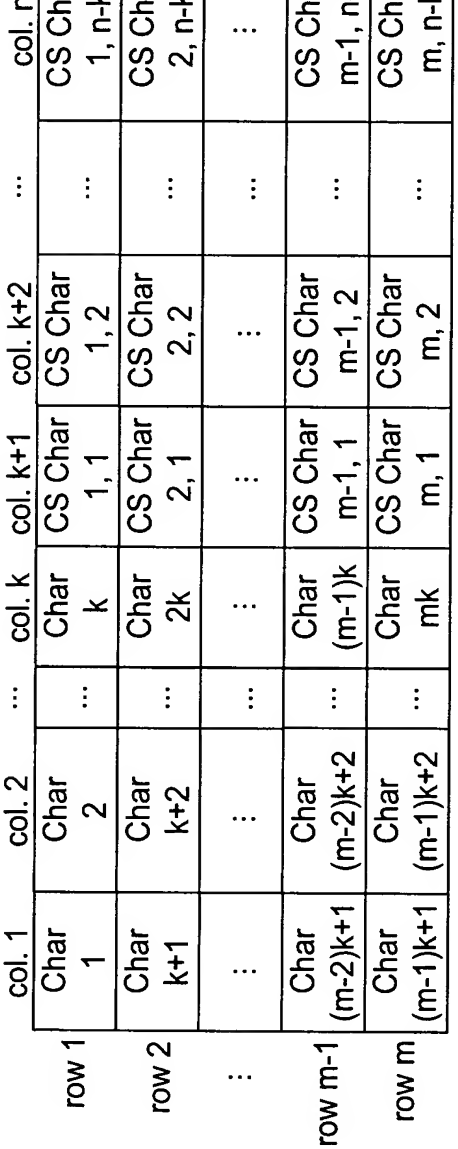

FIG. 4
(Prior Art)

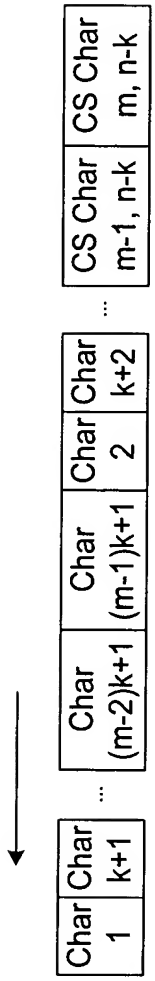

FIG. 5
(Prior Art)

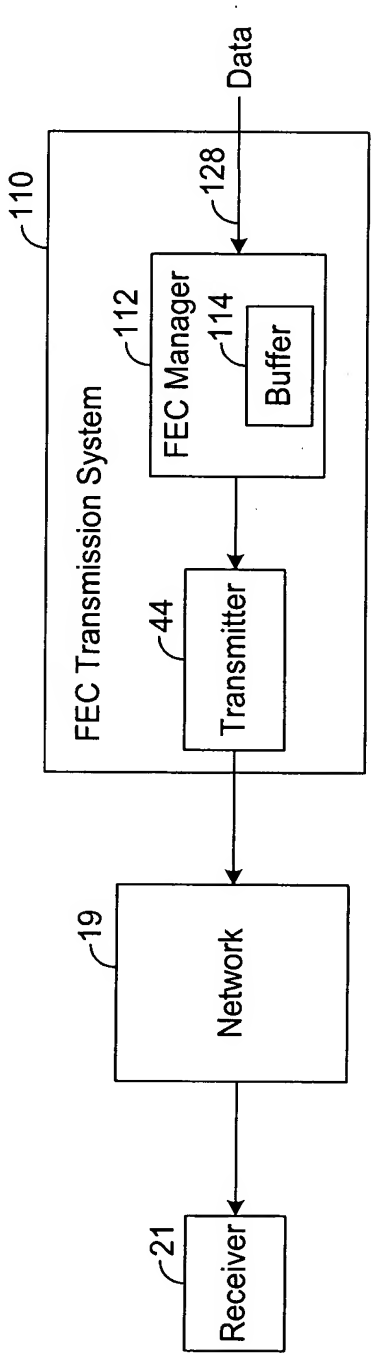

FIG. 6

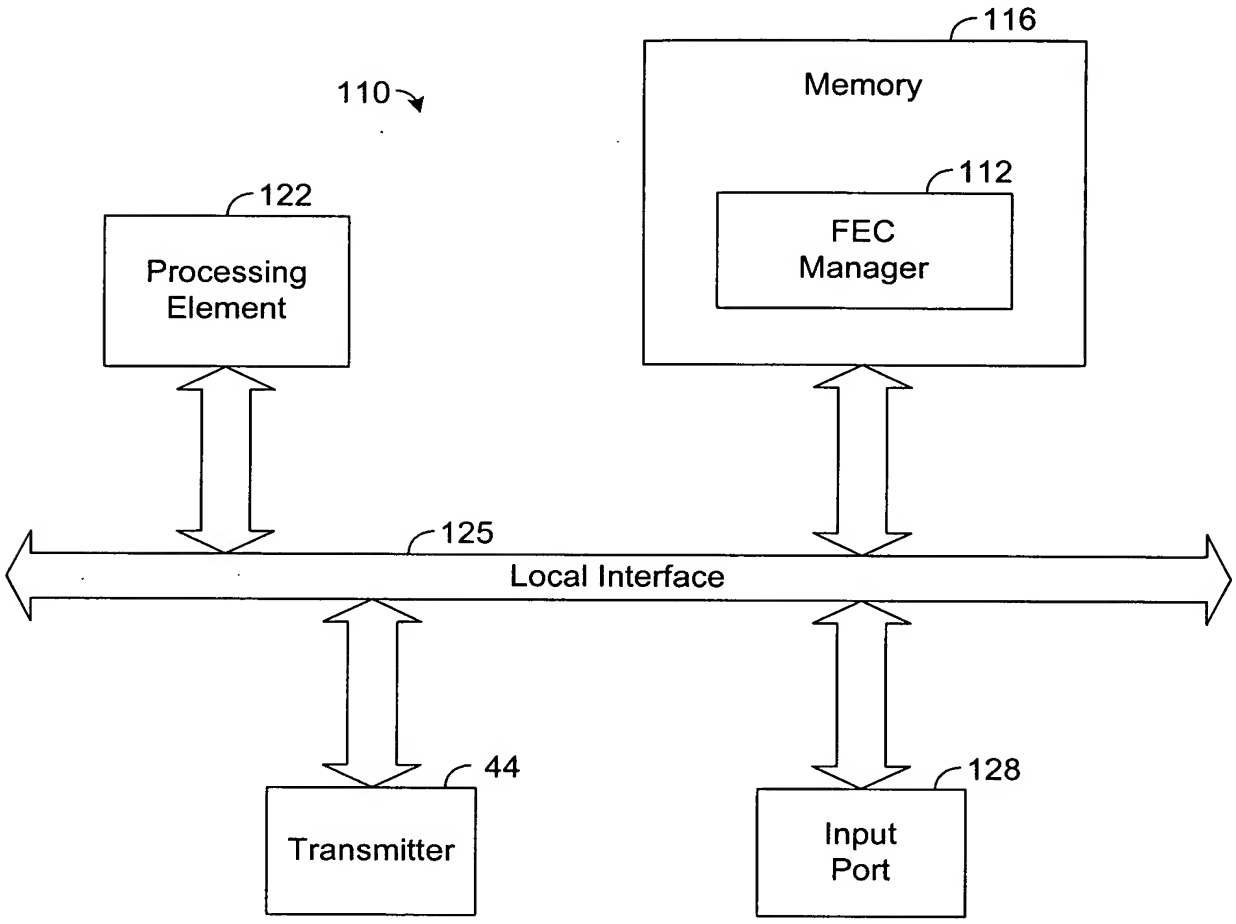
116
Memory
110
112
FEC
Manager
122
Processing
Element
125
Local Interface
44
128
Transmitter
Input
Port

FIG. 7

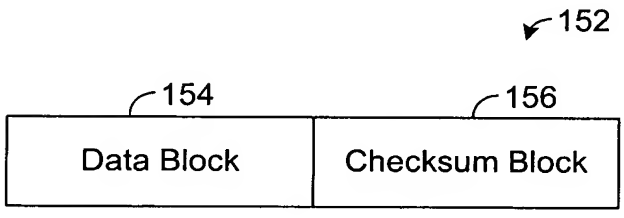
152
154
156
Data Block
Checksum Block

FIG. 8

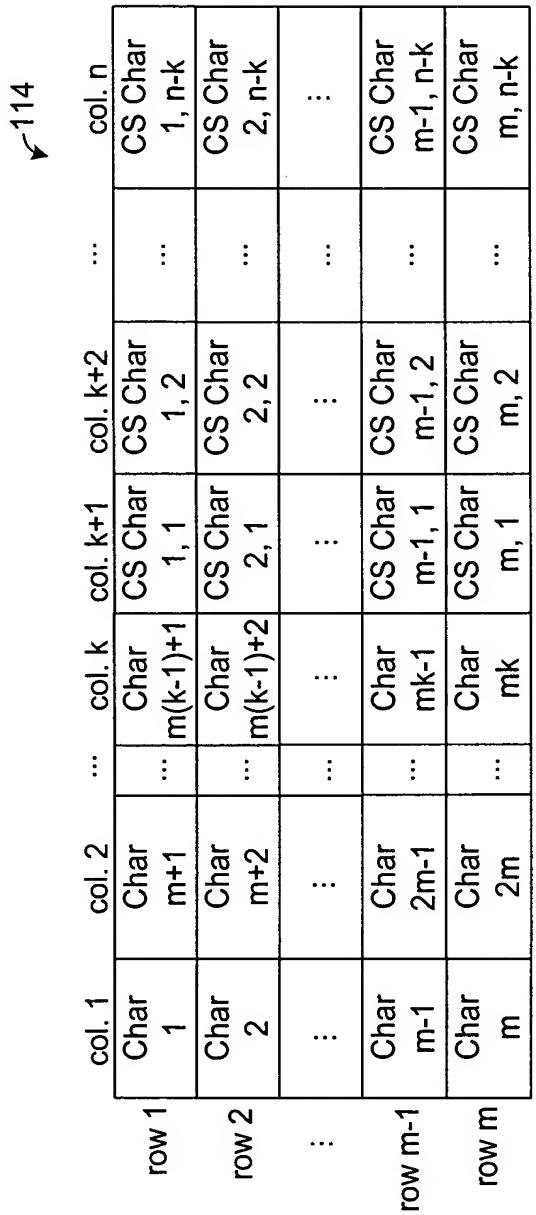
114
col. 1
col. 2
...
col. k
col. k+1
col. k+2
...
col. n
row 1
Char 1
Char m+1
Char m(k-1)+1
CS Char 1, 1
CS Char 1, 2
CS Char 1, n-k
row 2
Char 2
Char m+2
Char m(k-1)+2
CS Char 2, 1
CS Char 2, 2
CS Char 2, n-k
row m-1
Char m-1
Char 2m-1
Char mk-1
CS Char m-1, 1
CS Char m-1, 2
CS Char m-1, n-k
row m
Char m
Char 2m
Char mk
CS Char m, 1
CS Char m, 2
CS Char m, n-k

FIG. 9

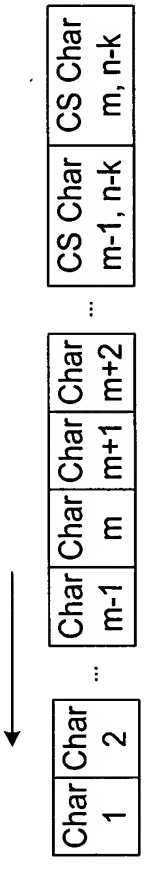
Char 1
Char 2
Char m-1
Char m
Char m+1
Char m+2
CS Char m-1, n-k
CS Char m, n-k

FIG. 10

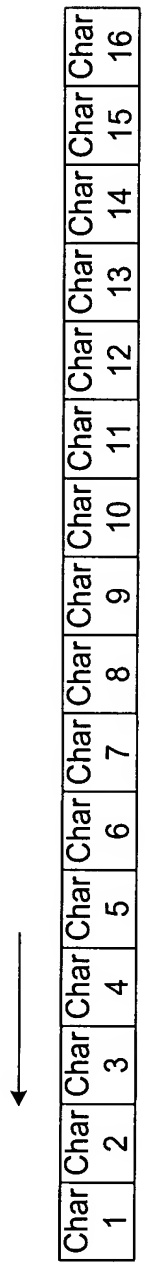

FIG. 11

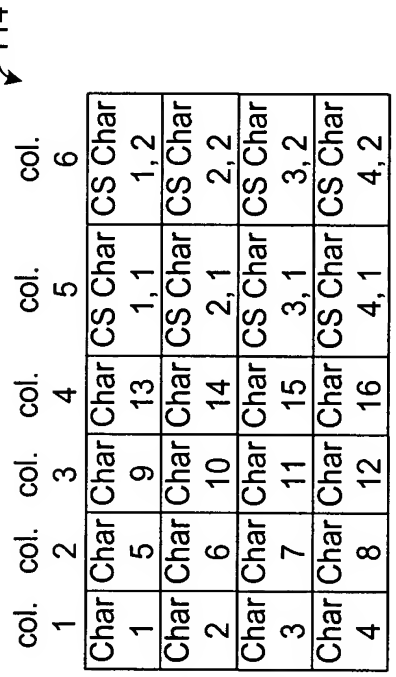

FIG. 12

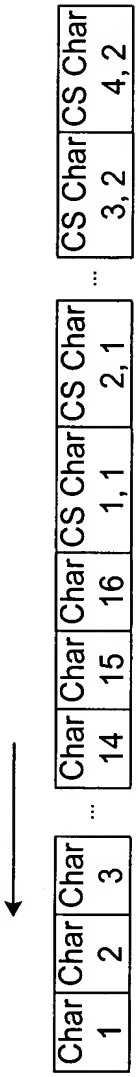

FIG. 15

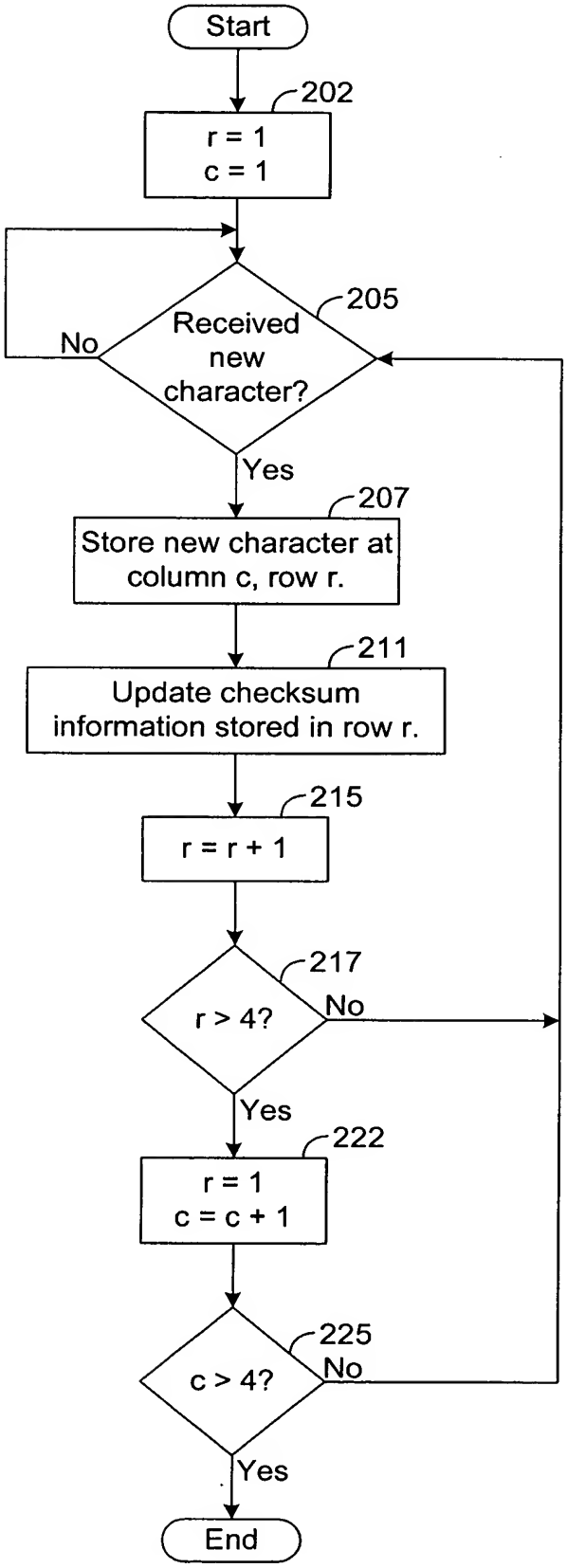
Start
202
r = 1
c = 1
205
Received new character?
No
Yes
207
Store new character at column c, row r.
211
Update checksum information stored in row r.
215
r = r + 1
217
r > 4?
No
Yes
222
r = 1
c = c + 1
225
c > 4?
No
Yes
End

FIG. 13

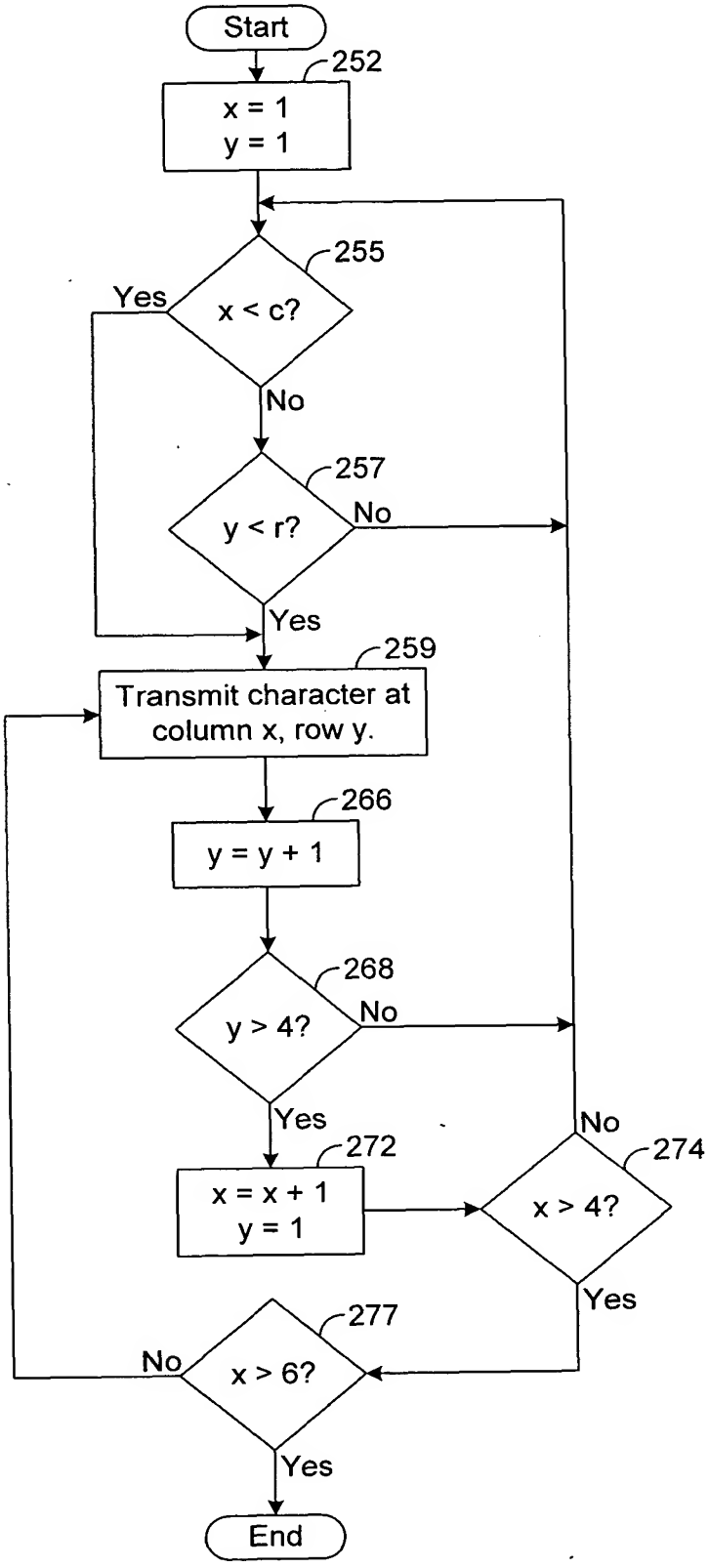
Start
252
x = 1
y = 1
255
x < c?
Yes
No
257
y < r?
No
Yes
259
Transmit character at column x, row y.
266
y = y + 1
268
y > 4?
No
Yes
No
272
274
x = x + 1
y = 1
x > 4?
Yes
277
No
x > 6?
Yes
End

FIG. 14